

REMARKS

In the Office Action, claims 1-3 and 20 stand rejected as being obvious in view of British Patent 1,390,302 (GB '302). In view of the comments below, Applicants respectfully traverse this rejection on the basis that GB '302 differs from the present application on the basis of several important particulars.

a. Invention Summarized

The present invention relates to a data medium that includes a printed image produced by the intaglio printing process. The image has at least one first ink area with a first ink layer thickness and at least one second ink area with a second ink thickness adjacent to the first ink area. The invention is distinguished in that the ink layer thicknesses are different, and that the first and second ink areas are directly adjacent to each other and separated from each other by a sharp border line not visible to the naked eye. It will be noted that the ink layer thickness of both ink areas pass through a minimum in the region of the border line.

b. Invention Distinguished

GB '302 describes an intaglio printing method for making an imprint of inked intaglio pattern elements in the form of lines that include background portions that are readily recognizable image portions formed by pattern elements of the imprint. The pattern lines that form the image portions differ in orientation or depth from pattern lines forming the background portion to provide a variation in contrast between image and background with a change in angle of view of the document. The pattern lines are arranged so that the image blends visually with the background from one angle of view but appears as a readily recognizable symbol in clear contrast to the background from another angle of view.

Turning to FIG. 15 of GB '302 which was asserted against the present application, the imprint includes the background 52 formed of parallel, spaced, raised and inked intaglio lines 53, and a transient image 54 formed further of intaglio lines 55 parallel and interposed between lines 53 (page 10, lines 86-96). It will be noted that the printing platen used to form the lines 53 and 55 includes a plurality of grooves representing the depth and position to the background and image lines of the imprint (page 11, lines 10-19; FIG. 12).

While it is clear that GB '302 illustrates alternating lines having a different depth, it is not evident that GB '302 describes or suggests the background lines 53 and the image lines 55 as being separated from each other by a sharp border line not visible to the naked eye as recited in claim 1 of the present invention. As shown in FIG. 15 of GB '302, there is no illustration that shows a sharp border line between the background and image lines 53, 55. Instead, it is apparent that there is a gap between each of the directly adjacent lines 53, 55, which cannot possibly be construed as a sharp border line between adjacent ink areas as in claim 1 of the invention.

There is no disclosure or suggestion in the written specification of GB '302 that supports the Examiner's assertion that FIG. 15 shows the sharp border line of the present invention. In fact, it is evident from the drawings and specification of GB '302 that the adjacent background and image lines are separated by a gap. This is clear in view of the description in FIGS. 16-19 of the formation of plural latent and transient images (page 11, lines 85-87 and lines 98-108) in accordance with the principles of the invention of GB '302. In particular, FIGS. 18 and 19 show detailed cross-sectional views as to how the large square ink areas 70 and the intermediate dot ink areas 72 or 74 are spaced from one another. It is clear from these detailed views that there is indeed a gap between the adjacent square and dot ink areas, further supporting Applicants' assertion that GB '302 does not disclose or suggest adjacent ink areas having a sharp border line therebetween.

Contrary to the subject matter described in GB '302, the present invention relates to a printed image with first and second colored areas that are directly adjacent to one another and separated by a sharp border line that is not visible to the naked eye. The inventive printing platen used to form the printed image of the present invention has recesses that vary in depth and are directly adjacent to one another. Furthermore, the recesses have a separating edge therebetween that causes a wedging action into the color layer of the data medium. This separating edge permits the formation of sharp border lines between directly adjacent ink areas. Conversely, GB '302 does not disclose a platen that yields a printed image having printing areas having sharp border lines between directly adjacent ink areas.

It will be pointed out that GB '302 and the present invention are different in that the printed image of the present invention has directly adjacent ink areas that do not have mixing or mutual migration since they are separated by the sharp border line. On the other hand, GB '302 does not disclose or suggest a printed image that has ink areas with sharp border lines, and further does not disclose a platen for producing the same. There is simply no specific teaching in GB '302 as to how ink areas of different thicknesses should be printed immediately adjacent to each other using an intaglio printing method.

Accordingly, it is respectfully submitted that GB '302 does not disclose or suggest the data medium having the printed image recited in claim 1 of the present invention. Therefore, withdrawal of the rejection is respectfully requested.

In view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is respectfully requested that claims 1-3 and 20 be allowed and the application be passed to issue.

Application No.: 09/787,919
Examiner: Anthony H. NGUYEN
Art Unit: 2854

If any issues remain that may be resolved by a telephone or facsimile communication with the Applicants' Attorney, the Examiner is invited to contact the undersigned at the numbers shown below.

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Respectfully submitted,

A handwritten signature in black ink, appearing to read "Justin J. Cassell", with a long, sweeping horizontal line extending to the right.

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